

Nitrite by Colorimetric Method**SM 4500-NO₂- B – 2000 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 4020.

Facility Name: _____ LAB ID _____

Assessor Name: _____ Analyst Name: _____ Inspection Date: _____

Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____

Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Analytical Procedure					
1. Is nitrite-free reagent water used in making all reagents and dilutions?	4500NO ₂ -B.3.a				
2. If the nitrite content is unknown, is the reagent water redistilled per the method?	4500NO ₂ -B.3.a				
3. Is color reagent stored in a dark bottle in the refrigerator and kept no longer than about one month?	4500NO ₂ -B.3.b				
4. If prepared in the laboratory, is the stock nitrite solution standardized using the procedure specified in the referenced method?	4500NO ₂ -B.3.e				
5. Are intermediate and analytical nitrite standards prepared fresh daily from stock solution?	4500NO ₂ -B.3.f				
6. For drinking water, are samples preserved at ≤6°C and analyzed within 48 hours?	EPA 815-R-05-004				
7. For wastewater, are samples cooled to ≤6°C and analyzed within 48 hours?	40CFR136.3 Table 1I				
8. If samples contain suspended solids, are they filtered using 0.45 µm pore diameter membrane filters?	4500NO ₂ -B.4.a				
9. Is sample pH verified to be between 5 and 9 or adjusted to that range using 1N HCL or NH ₄ OH?	4500NO ₂ -B.4.b				
10. Are 2 mL of color reagent added to 50 mL of sample and mixed?	4500NO ₂ -B.4.b				
11. Are samples read at 543 nm between 10 minutes and 2 hours after adding color reagent?	4500NO ₂ -B.4.c				
12. Is the appropriate light path used? 1 cm light path for 2-25 µg/L NO ₂ -N 5 cm light path for 2-6 µg/L NO ₂ -N 10 cm light path for <2 µg/L NO ₂ -N	4500NO ₂ -B.4.c				
13. Are sample concentrations computed directly from a standard curve?	4500NO ₂ -B.5				

Notes/ Comments: